

WHAT IS CLAIMED IS:

1. A pressure washing system for delivering a cleaning fluid under pressure to a surface to be cleaned, comprising:

a fluid pump unit for supplying the cleaning fluid under pressure to the surface to be cleaned;

a fluid collector for capturing waste fluid runoff of the cleaning fluid on the surface to be cleaned; and

a vacuum pump unit for withdrawing the captured waste fluid from the fluid collector.
2. A system according to claim 1, further including recycling units for enabling the re-use of the withdrawn waste fluid.
3. A system according to claim 2, wherein said recycling units include a holding tank unit for storing cleaning fluid for the pump unit.
4. A system according to claim 3, further including a settlement tank unit for receiving the captured waste fluid from the fluid collector.
5. A system according to claim 4, further including a vacuum pump unit for causing the captured fluid to be transferred from the collector to the settlement tank unit.
6. A system according to claim 5, further including a separator for receiving waste fluid from the settlement tank unit to remove contaminants therefrom to provide a clarified fluid to the holding tank unit for recycling purposes.
7. A system according to claim 6, further including a fluid heating unit to provide heated cleaning fluid under pressure being supplied to the surface to be cleaned.

8. A system according to claim 7, wherein said fluid heating unit includes a fluid heating tank for receiving fluid under pressure from the fluid pump unit, and a burner for heating the fluid in the fluid heating tank.
9. A system according to claim 8, further including a controller for monitoring the temperature of fluid flowing into and out of the fluid heating tank and for controlling the burner should the temperatures of the fluid flowing into or out of the fluid heating tank is other than certain desired temperatures.
10. A system according to claim 6, wherein said separator including a separator tank confining a filter pad therein having multiple layers composed of polypropylene fiber material.
11. A system according to claim 10, wherein said separator tank includes a perforated baffle, said filter pad being folded over the perforated baffle within an inlet compartment, and an outlet compartment communicating with the inlet compartment.
12. A system according to claim 5, wherein said vacuum pump unit includes a blower having a discharge outlet, two mufflers connected in fluid communication with the discharge outlet, an integral muffler installed engine driving the blower, and a second muffler connected in fluid communication with the exhaust outlet.
13. A system according to claim 5, wherein said vacuum pump unit includes an inlet, and a vacuum relief valve having a spring loaded valve member.
14. A system according to claim 4, wherein said settlement tank unit includes at least one settlement tank having an inlet, said tank having a filter screen therein dividing said tank into at least two compartments, having a filter bag disposed over the settlement tank inlet, and having a sump pump for discharging fluid from the settlement tank.

15. A system according to claim 1, wherein said suction collector is substantially hollow throughout its length and includes an elongated perforated surge barrier and a perforated suction conduit for being disposed within the hollow interior of said barrier.
16. A system according to claim 1, wherein said perforated suction conduit has a set of angularly disposed inlets, said inlets disposed at an angle from the vertical near the surface to be cleaned, said angle being between about 10° and about 20°.
17. A system according to claim 16, wherein said angle is about 15°.
18. A system according to claim 16, wherein said suction conduit is generally circular in configuration and has an inside diameter of between about one inch and about 2.5 inches.
19. A system according to claim 13, wherein said inside diameter is about 1.5 inches.
20. A system according to claim 1, wherein said fluid pump unit includes a positive displacement piston pump having a pair of inlet ports and a discharge outlet, a tee for supplying fluid to both of said inlet ports, and a pressure relief valve connected in fluid communication with said discharge outlet.
21. A system according to claim 1, wherein said fluid pump unit includes a by-pass valve for re-circulating fluid from the discharge outlet from the pump unit.
22. A method for delivering a cleaning fluid under pressure to a surface to be cleaned, comprising:

supplying the cleaning fluid under pressure to the surface to be cleaned;

capturing waste fluid runoff of the cleaning fluid on the surface to be cleaned;

and

withdrawing the captured waste fluid from the fluid collector using a vacuum pump unit.

23. A method according to claim 22, further including enabling the re-use of the withdrawn waste water for recycling purposes.

24. A fluid separator unit, comprising:

a separator tank; and

a filter pad disposed within the tank and having multiple layers composed of polypropylene fiber material.

25. A fluid separator unit according to claim 24, wherein said separator tank includes a perforated baffle, said filter pad being folded over the perforated baffle within an inlet compartment, and an outlet compartment communicating with the inlet compartment.

26. A pumping component, comprising:

a settlement tank unit including at least one settlement tank for receiving a contaminated liquid to be clarified;

a vacuum pump unit for drawing air entrained with the contaminated liquid into the settlement tank unit and withdrawing air from the tank unit to the vacuum pump unit; and

the vacuum pump unit including a blower for drawing air into and from the tank unit.

27. A fluid collector, comprising:

an elongated perforated surge barrier being substantially hollow throughout its length;

a perforated suction conduit disposed within the hollow interior of said barrier, said suction conduit being adapted to be connected in fluid communication with a source of vacuum; and

wherein said perforated suction conduit has a set of angularly disposed inlets, said inlets disposed at an angle from the vertical near the surface to be cleaned, said angle being between about 10° and about 20°.

28. A fluid collector according to claim 27, wherein said suction conduit is generally circular in configuration and has an inside diameter of between about one inch and about 2.5 inches.